Finally, the FLM found that air quality had been improving, not deteriorating, in the Class I areas.

The FLM's decision and findings in early 1993 provide a point of departure for whether events or developments occurring since that time provide any substantial technical or scientific basis for believing that significant deterioration may have occurred in North Dakota's Class I areas.

D. Actual ambient air quality measurement in North Dakota Class I areas since 1993 show stable or declining ambient SO2 levels, indicating that there is no evidence of deterioration in air quality-related values in Class I areas.

The following Figures 2, 3, 4 and 5 show the actual SO2 ambient monitoring data from stations located at TRNP North and South Units from 1979 to the present. Lostwood Wilderness Area is not included because there is very limited data and no data at all after 1991.

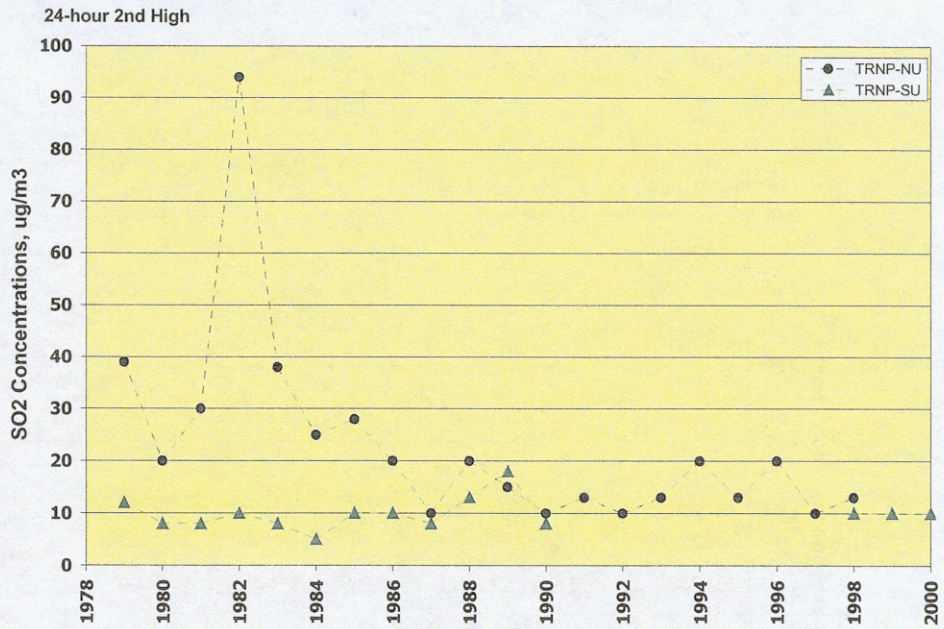


Figure 2

Figure 3

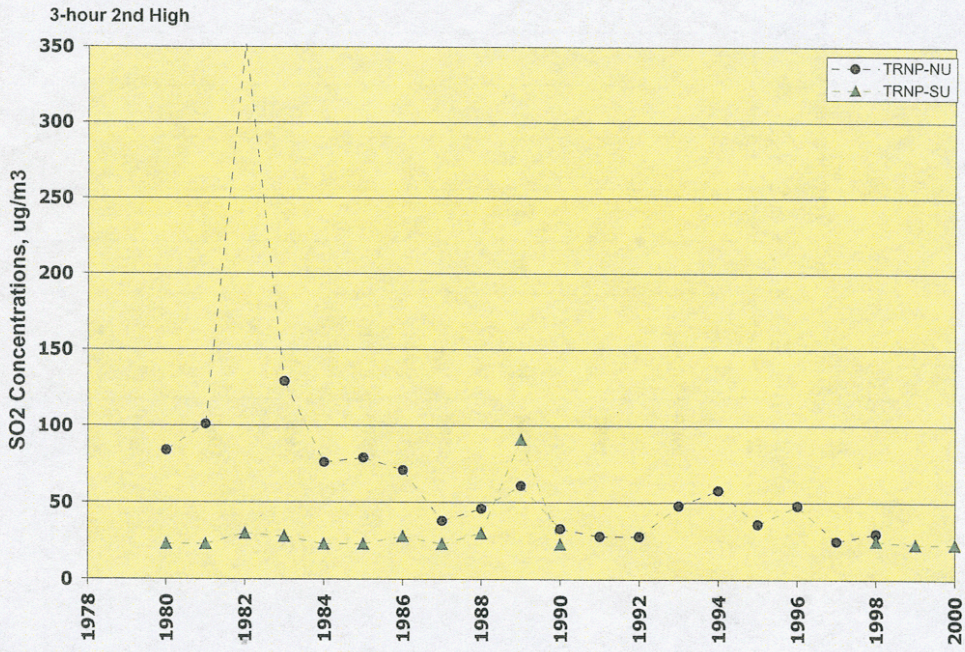


Figure 4

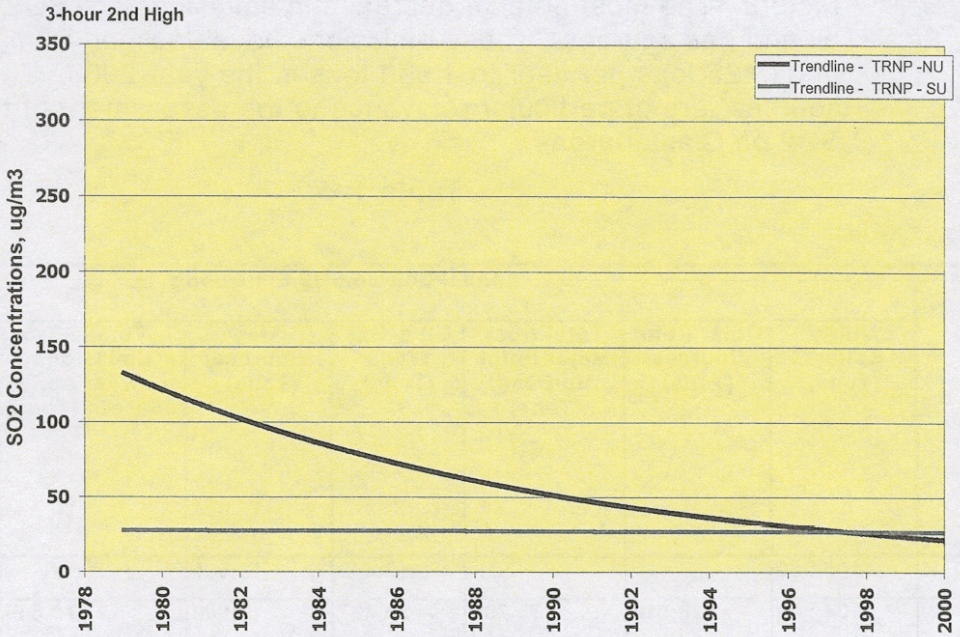


Figure 5

Figures 2 & 3 show the ambient monitored highest second high 24-hour SO2 readings, and their trend lines. Figures 4 & 5 show ambient monitored highest second high 3-hour readings and their trend lines. The 24-hour and 3-hour data time periods were selected because none of the existing modeling suggests that the annual SO2 Class I increments are exceeded in North Dakota Class I areas. The increments are written to assess the highest second high. 42 U.S.C. 7473(a) ("for any period other than an annual period, such regulations shall permit such maximum allowable increase to be exceeded during one such period per year.")

Figures 2, 3, 4 and 5 demonstrate clearly that SO2 levels in TRNP North and South Units have been stable or trended downward since 1993. Given the 1993 finding that AQRVs in Class I areas were not adversely impacted, the absence of any subsequent increase in ambient SO2 levels provides an additional margin of safety for protection of air quality-related values in these Class I areas.

E. Actual emissions from North Dakota sources have not increased significantly since 1993. Actual SO2 emissions from minor sources in proximity to North Dakota's Class I areas have decreased very significantly.

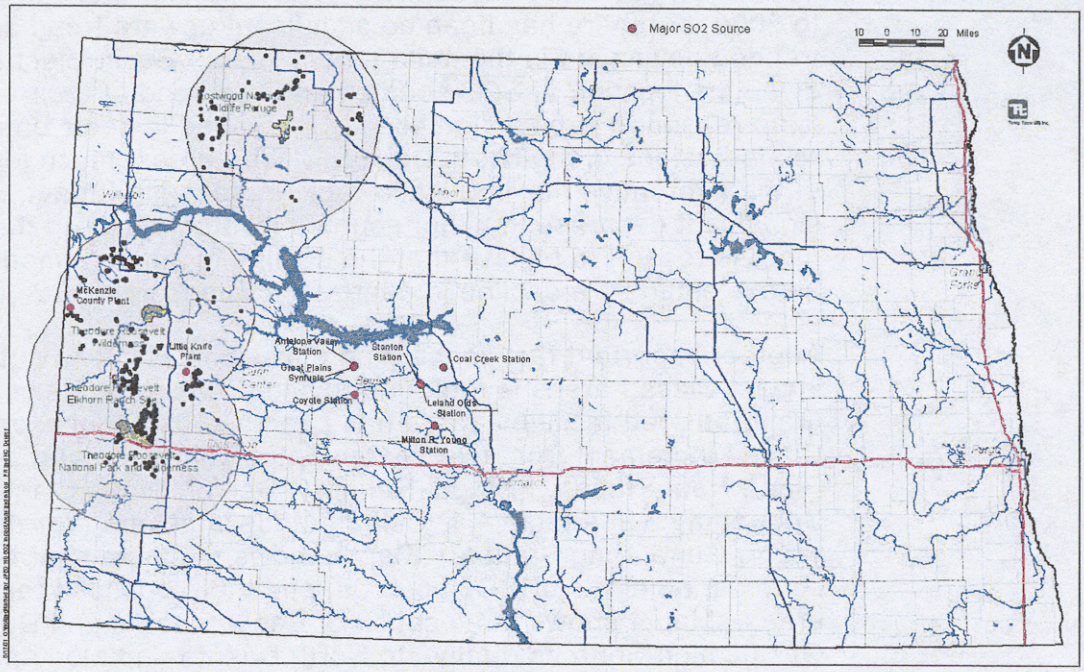
Table 1 presents data on actual North Dakota SO2 emissions from 1980-2000 for several categories of sources. These actual emissions vary from year to year based on economic cycles, market demand, and other

factors. The most notable decrease in emissions are SO2 emissions from oil and gas sources. These emissions have declined from a peak in 1982 of 34,425 tons per year to 4,900 tons in the year 2000. These "minor sources" are of particular relevance to the assessment of the impacts of SO2 on Class I areas.

Table 1

Year	Annual Source SO2 Emissions						
	Utility Boilers (Tons)	Other Point Sources (Tons)	Total from Major Point Sources (Tons)	Oil & Gas Wells (Tons)	Area Sources (Tons)*	Total SO_2 Emissions from All Sources (Tons)	Avg. SO_2 Emissions From Utility Boilers (LB/MMBTU)
1980	105,990			12,442	19,500		
1981	104,849	28,519	133,368	20,797	19,500	173,665	1.25
1982	115,482	26,601	142,083	34,425	19,500	196,008	1.25
1983	133,443	28,049	161,492	22,066	19,500	203,058	1.27
1984	136,937	33,653	170,590	19,436	19,500	209,526	1.27
1985	144,763	56,288	201,051	16,096	20,875	238,022	1.24
1986	128,659	60,196	188,855	21,687	21,000	231,542	1.11
1987	117,620	62,329	177,949	11,523	21,000	212,472	1.02
1988	149,441	55,766	205,207	13,351	21,000	239,558	1.05
1989	142,748	52,921	195,669	10,714	21,000	227,383	1.05
1990	156,109	44,221	200,330	10,217	21,000	231,547	1.09
1991	164,798	44,967	209,765	11,568	21,000	242,333	1.13
1992	162,211	57,752	219,963	11,048	21,000	252,011	1.08
1993	160,691	50,622	211,313	9,482	21,000	241,795	1.06
1994	160,630	50,020	210,650	7,769	21,000	239,419	1.06
1995	159,951	50,389	210,340	7,063	21,000	238,403	1.07
1996	173,997	61,146	235,143	5,935	21,000	262,078	1.11
1997	168,222	35,536	203,758	5,448	21,000	230,206	1.13
1998	185,343	30,161	215,504	4,943	21,000	241,447	1.18
1999	185,105	25,239	210,344	4,943	21,000	236,287	1.17
2000	150,771	23,290	174,061	4,900	21,000	199,961	0.88

Map 2 shows minor SO2 sources (green) located within 50 kilometers of the North Dakota Class I areas. These minor sources were included in NDDH's 1999 Calpuff modeling. The particular relevance of these sources is that they are much closer to the Class I areas than many of the major sources and are at or near ground level. It is apparent that such sources are far more likely actually to impact the Class I areas than sources far more distant and downwind. Also, far smaller emissions in this local area may have far greater impact than a much larger emission diluted by meandering transport for 200 to 300 kilometers, as would be the case for LOS emissions. The decline in minor source SO2 emissions may help explain the decline in ambient monitored levels at the North Dakota Class I areas.



Map 2

Other notable trends in the data are those with respect to annual utility boiler SO2 emissions, SO2 emission rates from utility boilers, and total annual SO2 emissions from all sources. Relevant comparisons from Table 1 include the following:

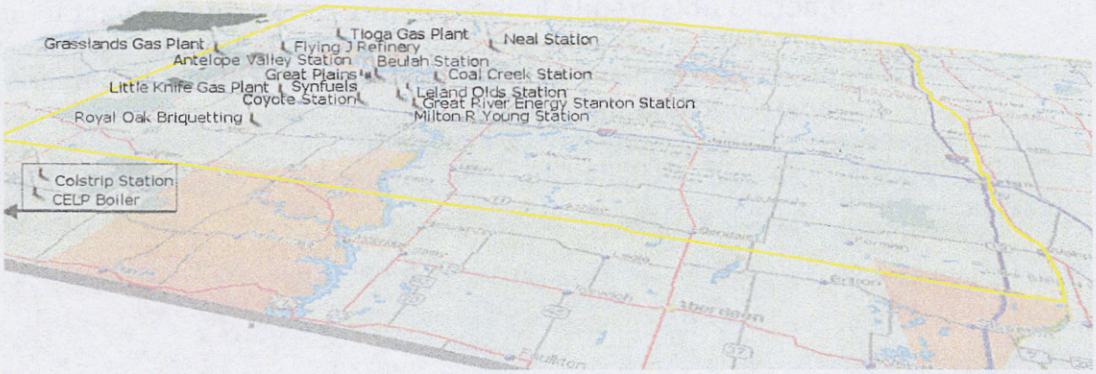
Utility Boiler SO2 emissions:	Tons Per Year
1993:	160,691
2000:	150,771

Average Utility Boiler SO2 emissions:	LBS/MMBTU
1993:	1.06
2000:	0.88

Total SO2 Emissions:	Tons Per Year
1993:	241,795
2000:	199,961

Table 1 shows some variability in total SO2 emissions in the period 1993 to 2000, but there has been no significant upward trend and levels have trended downward in the most recent years. Basin Electric submits that given the location of SO2 sources and the trend of their emissions, there is no reason to expect significantly increased impacts on air quality related values in the North Dakota Class I areas, much less exceedances of the alternative maximum allowable increases. In fact, given the significant decrease in minor sources located closer to the Class I areas, there is reason to believe that the decline in ambient monitored SO2 may be explained by a decline in nearby emissions sources.

Another important fact concerning emissions which have the potential to impact Class I areas is that, due to shutdowns or curtailments of grandfathered facilities, there has been a substantial expansion of the Class I increment from five "increment expanding" sources: Tioga Gas Plant, Neal Station, Flying J Refinery, Beulah Station, and Royal Oak Briquetting. (See table 4.1, Calpuff Modeling Report for the Milton R. young Generating Station.) Map 3 shows the increment expanding sources, other major SO2 sources, and their locations relative to Class I areas. Map 4 shows the location of Basin Electric and Dakota Gasification Sources relative to North Dakota and Montana Class I areas.



Map 3